IN THE CLAIMS

1.   (canceled)

2.   (canceled)

3.   (previously presented) A scanner as claimed in claim 7 wherein said data stream means is operative to store data elements from each channel, retrieve the stored data elements and form said stream from the retrieved data elements.

4.   (previously presented) A scanner as claimed in claim 7 wherein said data stream means is operative to provide said stream of data elements so that said stream includes a plurality of series of data elements, the data elements within each such series being data elements from a single one of said channels.

5.   (previously presented) A scanner as claimed in claim 7 wherein said data stream means is operative to provide said stream of data elements so that series of data elements from different channels are provided in alternating sequence, with a series of data elements from one channel followed by another series of data elements from a different channel.

6.   (canceled)

7.   (currently amended) A scanner comprising:

(a)   a plurality of input channels, each said channel including a photodetector, each such channel providing ~~an~~ data elements representing light impinging on the photodetector of such channel, each such channel ~~includes~~ including a signal processing and digitization circuit connected to the photodetector, wherein the signal processing and digitization circuit of each said channel is arranged to supply said data elements as transition data elements, each such transition data element including data denoting a transition as mark-to-space or space-to-mark and data denoting the duration of an interval between successive transitions;

(b)   means for exposing the photodetectors of said channels to light from objects to be scanned so that the light

impinging on the photodetector of each channel represents an optical property of objects to be scanned at a series of points along a scanning path associated with such channel;

(c) data stream means for accepting data elements from each channel and outputting a stream of data elements including data elements from said plurality of channels; and

(d) a decoder operative to examine said ~~steam~~ stream of data elements and recover information denoted by the data elements in said stream.

8.   (original) A scanner as claimed in claim 7 wherein the signal processing and digitization circuit of each channel includes (i) a signal processing circuit having an analog input connected to the photodetector and having an output (ii) a digitizer having an input connected to the output of the signal processing circuit.

9.   (previously presented) A scanner as claimed in claim 7 wherein said data stream means includes a FIFO buffer associated with each said channel and having an input connected to the processing and digitization circuit of such channel and an output, said data stream means further including a multiplexer having inputs connected to the outputs of the FIFO buffers associated with all of said channels and an output connected to said processor.

10.   (currently amended) A scanner comprising:

(a)   a plurality of input channels, each said channel including a photodetector, each such channel providing ~~an~~ data elements representing light impinging on the photodetector of such channel, wherein at least one of said channels is a partially-active channel having active and inactive intervals;

(b)   means for exposing the photodetectors of said channels to light from objects to be scanned so that the light impinging on the photodetector of each channel represents an optical property of objects to be scanned at a series of points

along a scanning path associated with such channel, said
exposing means being arranged so that data elements ~~from~~
provided by each ~~such~~ said partially-active channel ~~for~~ during
at least a part of each said inactive interval do not ~~represent~~
constitute meaningful data denoting light from objects to be
scanned;

(c) data stream means for accepting data elements
from each channel and outputting a stream of data elements
including data elements from said plurality of channels, and
wherein said data stream means is operative to provide the data
elements for each said active interval of each said partially-
active channel in a single series of consecutive data elements
within said stream; and

(d) a decoder operative to examine said ~~steam~~ stream
of data elements and recover information denoted by the data
elements in said stream.

11. (canceled)

12. (currently amended) A method as claimed in claim 15
further comprising storing data elements from each channel, the
step of forming a stream of data elements being performed by
recovering said stored data elements from each channel and
providing ~~a plurality of series~~ a plurality of series of data
elements, the data elements within each such series being data
elements from a single one of said channels.

13. (original) A method as claimed in claim 12 wherein
said series of data elements from different channels are
provided in alternating sequence in said stream of data
elements, with a series of data elements from one channel
followed by another series of data elements from a different
channel.

14. (original) A method as claimed in claim 12 further
comprising processing and digitizing the signals from each said
photodetector within the channel associated with such

photodetector, so that the data elements from each channel are in digital form.

15. (currently amended) A method of scanning objects bearing codes comprising:

(a) exposing a plurality of photodetectors, each associated with a separate input channel, to light from objects to be scanned so that the light impinging on each photodetector represents an optical property of objects to be scanned at a series of points along a scanning path associated with such photodetector;

(b) operating each such input channel to provide transition data elements representing light impinging on the photodetector of such channel, ~~wherein said data elements from each channel are transition data elements,~~ each such transition data element including data denoting a transition as mark-to-space or space-to-mark and data denoting the duration of an interval between successive transitions for such channel;

(c) forming a ~~steam~~ stream of said data elements including data elements from a plurality of said channels; and

(d) examining said stream of data elements in a decoder and recovering information denoted by the data elements in said stream of data elements.

16. (original) A method as claimed in claim 12 wherein said data elements from each channel are mark and space values each representing light impinging on the photodetector of such channel at a given time.

17. (original) A method as claimed in claim 12 or 13 wherein each said channel is associated with a separate FIFO buffer, and wherein said step of storing data elements includes inputting the data elements from each said channel to the FIFO buffer associated with such channel in temporal order, and wherein said step of forming said data stream includes outputting samples from one of said FIFO buffers at a time.

18. (previously presented) A method as claimed in claim 15 or claim 12 or claim 13 wherein said step of forming said stream of data elements is conducted so that data elements from all of said channels are included in said stream, and wherein only a single decoder is used to examine said stream.

19. (currently amended) A method of scanning objects bearing codes comprising:

(a) exposing a plurality of photodetectors, each associated with a separate input channel, to light from objects to be scanned so that the light impinging on each photodetector represents an optical property of objects to be scanned at a series of points along a scanning path associated with such photodetector, wherein at least one of said channels is a partially-active channel having active intervals and inactive intervals, said exposing step being conducted so that data elements from each such partially-active channel for at least a part of each said inactive interval do not represent meaningful data;

(b) operating each such input channel to provide data elements representing light impinging on the photodetector of such channel, said exposing step being conducted so that data elements provided by each said partially-active channels during the inactive intervals of such channels do not constitute meaningful data representing light from objects to be scanned;

(c) forming a steam stream of said data elements including data elements from a plurality of said channels, so that the data elements for each said active interval of each said partially-active channel is provided in a single series of consecutive data elements within said stream; and

(d) examining said stream of data elements in a decoder and recovering information denoted by the data elements in said stream of data elements.